

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

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| In the Matter of |) | |
| |) | |
| Amendment of the Commission's Rules with |) | GN Docket No. 12-354 |
| Regard to Commercial Operations in the 3550- |) | |
| 3650 MHz Band |) | |
| |) | |

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”) submits these comments in response to the Notice of Proposed Rulemaking (“*Notice*”) in the above-captioned proceeding, in which the Commission has proposed to create a new Citizens Broadband Service in the 3550-3650 MHz band (the “3.5 GHz Band”) through the use of small cells and spectrum sharing.¹

INTRODUCTION AND SUMMARY

CCA represents the interests of more than 100 competitive wireless carriers and has a strong interest in any Commission efforts to maximize the availability of spectrum sufficient to meet the growing demand of the wireless industry. As a result, CCA has consistently encouraged and supported the development of a regulatory framework that maximizes the amount of spectrum available to meet surging demand in mobile services, promotes competition for wireless services, and spurs innovation in the marketplace for mobile services.

¹ Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354, *Notice of Proposed Rulemaking*, FCC 12-148 (rel. Dec. 12, 2012) (“*Notice*”).

The Commission's proposal for the 3.5 GHz band aims to make more efficient use of radio spectrum through the exploration of small cell technology and spectrum sharing.² CCA commends the Commission for undertaking all of its efforts to increase wireless capacity within existing spectrum resources and to better determine more efficient uses of scarce spectrum resources.³ CCA recognizes that through this proceeding, the Commission is beginning the arduous task of investigating different avenues to make better and more efficient use of existing spectrum resources through small cells and spectrum sharing. However, the Commission should not limit the potential uses of the 3.5 GHz spectrum to only small cell usage. As the Commission notes repeatedly, flexible uses of spectrum allow for the most efficient uses, and such utilization of the 3.5 GHz band is no exception. The Commission should not preclude other potential uses for this spectrum, such as for wireless backhaul, from being employed. In addition, CCA also warns against the Commission imposing complex licensing rules for the 3.5 GHz band, as this may unnecessarily complicate the potential uses of this spectrum band, and further deter Commission time and resources from its focus on mitigating the spectrum shortage that currently exists.

Moreover, CCA urges the Commission to continue to investigate viable solutions for allocating increased licensed spectrum resources to enable competitive carriers to provide competitive mobile broadband services to consumers. Consistent with CCA's participation in recent proceedings, CCA reiterates the need for licensed spectrum to be made available for

² Notice ¶ 1.

³ See *id.* ¶¶ 4-5.

mobile wireless use.⁴ With such documented spectrum scarcity, the Commission must adopt the policies that will maximize the greatest benefits to any spectrum made available. The Commission must not lose focus from the main goal: to provide consumers with competitive mobile broadband wireless services.

DISCUSSION

I. THE COMMISSION SHOULD AVOID AN UNNECESSARILY COMPLEX UNLICENSED TIERED SYSTEM AND SHOULD AVOID UNNECESSARY LIMITATIONS ON THE POTENTIAL USES OF THE 3.5 GHz BAND

The *Notice*'s proposal anticipates "increas[ing] the availability of spectrum for commercial broadband" through the leveraging of "new technologies to allow spectrum to be shared between federal and commercial users."⁵ Such a proposal is in stark contrast to the "traditional practice of clearing portions of federally held spectrum for exclusive commercial use."⁶ In order to implement this new shared spectrum framework, the Commission introduces an overly-complex, three-tiered shared access model using a license-by-rule framework.⁷ Under this model, the Incumbent users will remain in their areas, known as "exclusion zones," which consist of approximately 60 percent of the U.S. population.⁸ The new commercial uses of the band will be permitted to operate in the other 40 percent outside of these exclusion zones.⁹ The multi-tiered system provides different levels of interference protection among the three classes of

⁴ See, e.g., Comments of Competitive Carriers Association, Docket No. 12-268 (filed Jan. 25, 2013) ("CCA Incentive Auction Comments"); Comments of Competitive Carriers Association, WT Docket No. 12-357 (filed Feb. 6, 2013) ("CCA H Block Comments").

⁵ *Notice* ¶ 40.

⁶ *Id.*

⁷ *Id.* ¶¶ 70, 75.

⁸ *Id.* ¶ 67.

⁹ *Id.* ¶¶ 6, 67.

Citizen Broadband Service users.¹⁰ The proposal also requires certain devices to include geo-location technology for their interference mitigation efforts. Finally, in order to monitor the interaction between these tiers, the Commission proposes to establish a spectrum access system, (a “SAS”) database, which will incorporate the geo-location technology along with other mitigation techniques.¹¹

While CCA is in favor of creative proposals that would put otherwise inefficiently used spectrum to a higher and better use, there are several issues with this proposal. To start, this three-tiered proposal is overly complicated. Indeed such a proposal essentially implicates a complete overhaul of previous Commission policy.¹² This proposal involves complications that will likely produce a longer transition period than necessary to work out unforeseen issues. The record acknowledges that “these changes will take time”¹³ and the Commission should minimize this unnecessary complexity and focus less on process, and more on ways to put the 3.5 GHz band to use as quickly as possible.

The proposal, as is currently presented in the *Notice*, contains far too narrow of a scope for examining more efficient means of utilizing spectrum in the 3.5 GHz band. With the amount of time and resources that the Commission will have to dedicate to the implementation of this model, it would be to the Commission’s advantage to broaden its scope of potential uses of the 3.5 GHz band in order to maximize the results of this proceeding. Throughout the *Notice*, the

¹⁰ *Notice* ¶ 7.

¹¹ *Id.* ¶ 53.

¹² PCAST argues that “the traditional practice of clearing portions of federally held spectrum for exclusive commercial use is not a sustainable basis for future spectrum policy.” Rather, PCAST recommends that the Commission “leverage new technologies to allow spectrum to be shared between federal and commercial users.” *Notice* ¶ 40.

¹³ *Notice* ¶ 43.

Commission solely focuses upon how “this proposed framework would facilitate the rapid deployment of compliant small cell devices.”¹⁴ But, by only focusing on small cell technology, the Commission is essentially predetermining the potential uses of this spectrum – uses that may not be the most efficient means of maximizing this spectrum. This is a short-sighted decision that could potentially have long-term effects.

As repeatedly noted, the Commission is facing an approaching deadline to make more spectrum available for wireless services. Specifically, it is estimated that there will be a need for a thousand-fold increase in wireless capacity by 2020.¹⁵ As Chairman Genachowski recently recognized, “like many of our natural resources, spectrum is finite” and therefore “we must make better, more efficient use of spectrum.”¹⁶ This proceeding is an opportunity to do just that – explore ways to make better and efficient use of available spectrum. Therefore, rather than predetermine the outcome of this proceeding by only focusing on small cell technology – which provides no guarantees of beneficial use at this time – the Commission should expand its exploration of the potential uses of the 3.5 GHz spectrum to more flexible uses, such as for wireless backhaul. By allowing for and contemplating various potential uses into this proceeding, the Commission will be ensuring that the 3.5 GHz band is used to its full potential and the spectrum is maximized for its most efficient use.

¹⁴ Notice ¶ 62.

¹⁵ *Id* ¶ 2.

¹⁶ Prepared Remarks of FCC Chairman Julius Genachowski, Winning the Global Bandwidth Race: Opportunities and Challenges for Mobile Broadband (Oct. 4, 2012) <http://www.fcc.gov/document/chairman-genachowski-winning-global-bandwidth-race>

II. THE COMMISSION’S EFFORTS TO DETERMINE EFFICIENT USES OF SPECTRUM ARE ADMIRABLE, BUT THE FOCUS SHOULD REMAIN ON SATISFYING THE DEMAND FOR MOBILE WIRELESS BROADBAND SPECTRUM

CCA supports the Commission’s latest efforts in examining additional spectrum opportunities in the 3.5 GHz band. This proceeding is a good starting point to determine more efficient uses of existing spectrum resources, and to better prepare the industry for the growing demands of consumers. However, while experimentation of small cells and spectrum sharing in the 3.5 GHz band will be helpful to determine the ability of these technologies and policies, “[t]his band is above the 3 GHz threshold often identified as the cutoff for ideal spectrum for mobile cellular uses.”¹⁷ As a result, CCA encourages the Commission not to lose sight of the goals it established in the *National Broadband Plan* and to continue to explore additional spectrum opportunities for mobile broadband services.

As the Commission has explained, “[s]pectrum is the lifeblood of the wireless industry,”¹⁸ and now, the demand for this lifeblood is so high, that “some experts forecast a need for a thousand-fold increase in wireless capacity by 2020.”¹⁹ Without making additional sufficient usable spectrum available, carriers’ ability to innovate and remain relevant in a fast-changing industry is severely compromised. Thankfully, these cries for additional spectrum have not fallen on deaf ears. The Commission has recognized the shortage of available spectrum for broadband uses and the urgent need to make additional spectrum available, particularly for competitive carriers. In order to meet the *National Broadband Plan*’s goals of identifying and

¹⁷ Notice ¶ 19.

¹⁸ Prepared Remarks of Chairman Julius Genachowski, “Innovation in a Broadband World,” The Innovation Economy Conference, Dec. 1, 2009.

¹⁹ Notice ¶ 2.

dedicating an additional 500 MHz of spectrum for mobile broadband use by 2020,²⁰ the Commission has recently examined several spectrum opportunities that CCA has supported: Incentive Auctions²¹ and divestiture of the H Block.²² This focus has been positive and the wireless industry has been actively engaged in these proceedings – affording the Commission momentum that it should use to its advantage to help determine viable solutions to this Nation’s looming spectrum crunch as quickly as possible.

CCA has consistently advocated for licensed spectrum offerings in order to alleviate mobile broadband demands.²³ Unleashing more licensed spectrum will result in faster, more efficient deployment of 4G services. More importantly, licensed spectrum will help alleviate the impending spectrum concerns. The “spectrum crunch” is – in part – a result of increased consumer reliance on smartphones, tablets, laptops, and other wireless devices.²⁴ These mobile devices rely on licensed wireless spectrum, and without plentiful, regular and meaningful access to wireless spectrum, providers are simply not able to offer these robust services to their consumers.

The Commission has traditionally “promoted innovative policies and licensing models that seek to increase communications capacity and efficiency of spectrum use, and make spectrum available to new uses and users.”²⁵ In order to ensure these objectives are met, the

²⁰ Connecting America: The National Broadband Plan, at 84. (“*National Broadband Plan*”).

²¹ See generally CCA Incentive Auction Comments.

²² See generally CCA H Block Comments.

²³ See e.g., CCA H Block Comments at 11-14; CCA Incentive Auction Comments at 12-15.

²⁴ See FCC, Spectrum Crunch <http://www.fcc.gov/encyclopedia/spectrum-crunch>

²⁵ Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Report and Order and* (continued...)

Commission must license spectrum in a manner that creates opportunities for competitive carriers to continue to acquire spectrum and deploy mobile services. The current market revolves around rapidly-changing technology, increased consumer demand, and drastically low resources, and offering licensed spectrum will ensure that carriers have the proper resources available to respond to the changing consumer demands for wireless services and continue to innovate and drive competition.

CONCLUSION

CCA supports the Commission's desire to explore new opportunities to enable efficient use of spectrum in light of the looming spectrum crunch. This proceeding is a good start to develop ways to increase wireless capacity within existing spectrum resources and determine more efficient uses of such spectrum. However, CCA cautions the Commission against limiting its exploration of the potential uses of the 3.5 GHz band. By limiting its focus to small cells, which are only "intended to cover targeted indoor or localized outdoor areas," the Commission may risk ignoring other potential uses of this spectrum, such as wireless backhaul. CCA also warns against imposing certain rules that may unnecessarily complicate the potential uses of this band. Finally, CCA reiterates the need for licensed spectrum to be made available for wireless use to better satisfy consumer demand for wireless broadband services.

(...continued)

Further Notice of Proposed Rulemaking, DA 03-113 ¶ 57 (rel. Oct. 6, 2003) ("*Secondary Markets R&O*").

Respectfully submitted,

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February 20, 2013